

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:

determining with a BIOS, a maximum sustainable power level for an integrated circuit based upon environmental system characteristics and design characteristics of the integrated circuit, ~~characteristic data~~ wherein the environmental system characteristics include ambient air temperature and the design characteristics include a maximum junction temperature of the integrated circuit;

translating the maximum sustainable power level into a maximum performance characteristic;

and

adjusting operation of the integrated circuit such that the maximum performance characteristic is not exceeded.
2. (Cancelled)
3. (Currently Amended) The method of claim 1 ~~2~~, wherein the ~~thermal~~ environmental system characteristics are stored within the ~~a~~ BIOS.
4. (Cancelled)
5. (Currently Amended) The method of claim 14, wherein the design characteristics are stored within the integrated circuit.
6. (Original) The method of claim 1, wherein the integrated circuit comprises a memory module.
7. (Original) The method of claim 6, wherein the memory module comprises a RDRAM memory module.

8. (Original) The method of claim 1, wherein the maximum performance characteristic comprises a maximum allowable data transfer rate.

9. (Original) The method of claim 8, wherein adjusting operation of the integrated circuit further comprises:

monitoring an amount of data transferred to and/or from the integrated circuit; and

reducing the amount of data transferred if the amount of data transferred results in a data transfer rate that exceeds the maximum allowable data transfer rate.

10. (Original) The method of claim 8, wherein adjusting operation of the integrated circuit further comprises determining an amount of time for which the maximum allowable data transfer rate may be sustained.

11. (Currently Amended) A apparatus comprising:

first circuitry to:

determine with a BIOS, a maximum sustainable power level for an integrated circuit based upon environmental system characteristics and design characteristics of the integrated circuit, ~~environmental characteristics~~ wherein the environmental system characteristics include ambient air temperature and the design characteristics include a maximum junction temperature of the integrated circuit;

translate the maximum sustainable power level into a maximum performance characteristic; and

adjust operation of the integrated circuit such that the maximum performance characteristic is not exceeded.

12. (Currently Amended) The apparatus of claim 11, wherein the ~~environmental characteristics~~
~~include integrated circuit~~ design characteristics are stored within the integrated circuit.

13. (Currently Amended) The apparatus of claim 11, wherein the environmental system
characteristics further include active, idle, and standby power consumption levels ~~thermal characteristics~~
stored within the ~~apparatus~~ integrated circuit.

14. (Original) The apparatus of claim 11, wherein the integrated circuit comprises a memory module.

15. (Currently Amended) A system comprising:

an integrated circuit; and

a BIOS coupled to the integrated circuit to:

determine a maximum sustainable power level for the integrated circuit based upon

environmental system characteristics and design characteristics of the integrated circuit,

~~environmental characteristics~~ wherein the environmental system characteristics include ambient

air temperature and the design characteristics include a maximum junction temperature of the

integrated circuit,

translate the maximum sustainable power level into a maximum performance
characteristic, and


adjust operation of the integrated circuit such that the maximum performance
characteristic is not exceeded.

16. (Currently Amended) The system of claim 15, wherein the integrated circuit comprises a memory
module having at least a portion of the environmental system characteristics stored thereon.

17. (Currently Amended) The system of claim 15, wherein the environmental system characteristics further include active, idle, and standby power consumption levels ~~thermal characteristics of the system~~ stored within the integrated circuit.

18. (Original) The system of claim 15, wherein the maximum performance characteristic comprises a maximum allowable data transfer rate.

19. (Currently Amended) An article of manufacture comprising a machine readable medium having a plurality of machine readable instructions stored thereon, wherein the instructions, when executed by a processor, cause the processor to:

 determine with a BIOS, a maximum sustainable power level for an integrated circuit based upon environmental system characteristics and design characteristics of the integrated circuit, wherein the environmental system characteristics include ambient air temperature and the design characteristics include a maximum junction temperature of the integrated circuit;

translate the maximum sustainable power level into a maximum allowable data transfer rate;

adjust operation of the integrated circuit such that the maximum allowable data transfer rate is not exceeded.

20. (Original) The article of manufacture of claim 19, further comprising instructions that, when executed by a processor, cause the processor to adjust operation of the integrated circuit by determining an amount of time for which the maximum allowable data transfer rate may be sustained.

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 3. This sheet, replaces the original sheet. In Fig. 3, previously omitted Prior Art has been added per the Examiner's suggestion. No new matter has been added.

Attachment: Replacement Sheet